



IT'S ALL THE BUZZ!



During the late 1960's, the City of Norman, in cooperation with the University of Oklahoma, created Norman's mosquito control program. The program was designed to collect data, identify species and control mosquitoes through larvicide application and spraying. By 2003, the Norman mosquito surveillance program was seen as a model for other cities across Oklahoma.



IT'S SCIENCE! Beginning in mid-March each year, the City's mosquito surveillance officer places light traps across Norman near locations known to provide mosquito habitat such as drainage channels and creeks. These traps attract night-flying mosquitoes which fall into collection jars that are retrieved daily. The collection jar contents are examined to identify mosquito species and number of females. If 25 females are caught in any one trap two days in a row, public notification will be issued for spraying in that particular area.

IT'S OUR ENVIRONMENT! Although the program's scientific method for collection and identification remains the same, treatment methods now focus more on the complimentary techniques of nontoxic larvicide application and the introduction of "mosquito fish", as the most effective and environmentally friendly solution to addressing the mosquito problem in channels and creeks.

The most common type of mosquito found in Norman over the last several years is the *Aedes albopictus* (Asian Tiger) mosquito. Although this type of mosquito is not a known carrier of disease in the United States, they can be fierce biters and, therefore, an extremely pesky nuisance. Since the tiger mosquito is a daytime biter, and does not normally fly at night, spraying is not an effective treatment to control this species. These mosquitoes prefer small containers and standing water, so it's important to empty them out regularly.

NEW CONCERN ON THE BLOCK! There has been a great deal of media attention regarding the latest emerging mosquito borne threat, so it is important to consider Zika. Zika is a mosquito borne disease that commonly occurs in many tropical and sub-tropical areas of the world. Presently, the Zika virus is NOT being spread by mosquitoes in the United States, but is spreading aggressively in regions of South and Central America and the Caribbean. Zika virus is transmitted to people primarily through the bite of an infected *Aedes aegypti* mosquito (different from the Asian Tiger mosquito). Zika can also be spread through sexual contact with males who have the virus or from mother to unborn child. The disease can cause fever, rash, muscle and joint aches, and red eyes. These symptoms typically are not severe and the infection normally only lasts up to a week. However, most people exposed to Zika virus won't develop any symptoms at all. Those with the most significant health risk of the Zika virus are pregnant women, as it can lead to fetal loss or severe birth defects in their unborn babies. Pregnant women

should take extra precautions if they or their partners are travelling to any area where Zika is prevalent. At this time, the Zika virus is NOT found in Oklahoma mosquitoes, therefore spraying is not an effective treatment to prevent the spread of Zika. Health officials continue to study the virus and its transmission, watching closely in case transmission begins in other mosquito types more common in Oklahoma. While Zika is not currently considered a significant mosquito borne threat in our area, it should still serve to emphasize the importance of mosquito control in local neighborhoods.



AN OLD NEMESIS REMAINS! Of more immediate concern in Oklahoma is West Nile. West Nile is an illness transmitted through the bite of a mosquito infected with the West Nile virus. The majority of people who are exposed to the West Nile virus will never become ill, and those who do become ill typically have mild symptoms such as fever, headache, body aches, and fatigue that go away on their own. In more severe cases, a person exposed to the virus could develop meningitis or other neurologic diseases. Although anyone can potentially become ill after being bitten by an infected mosquito, those over the age of 50 are at greater risk of developing a more serious illness. The West Nile virus is typically found in the Culex species of mosquitoes that are active during the morning and evening hours. This type of mosquito increases during mid to late summer when the temperatures climb and the weather is drier. Neighborhood spraying can be an effective means to reduce this mosquito population, but will typically only be used in Norman when trapping indicates an increase in the Culex mosquito population.

IT'S EVERYONE'S RESPONSIBILITY! The best way to help control the mosquito population and reduce the risk of any type of mosquito borne disease is to eliminate their habitats. Easy ways to be a good neighbor and to help eliminate mosquitoes in your own back yard include:



- **Clean out your gutters and down spouts to let water run freely.**
- **Replace water daily in wading pools, bird baths and pet watering bowls.**
- **Keep your lawn cut short and shrubbery trimmed.**
- **Stock your water garden with fish.**
- **Remove standing water from all containers such as old tires, buckets, yard waste, etc.**
- **Fill in low spots in your yard to prevent standing water.**
- **Keep mosquito dunks in your rain barrels.**
- **See the internet for many sources of Purple Martin birdhouse information.**
- **If you have a neighbor who is elderly or disabled, ask permission to help eliminate standing water in their yard too!**

To get the most from your summer outdoor fun, be sure to protect yourself and your children by wearing light colored clothing and using insect repellents. Repellents containing DEET, picaridin, oil of lemon and eucalyptus (PMD), or IR 3535 are most effective.